Cognitive Behavior Therapy With A Migrant Pakistani In Malaysia: A Single Case Study Of Conversion Disorder

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This clinical case presents a 24 years old, Muslim Pakistani girl with a history of conversion disorder. Her symptoms comprised fits, restlessness, numbness in legs, poor coordination, and balance, burning during urination and retention. A Cognitive Behavioral Model was used for conceptualizing her problem and devising a management plan based on Cognitive Behavioral Therapy and culturally adapted coping statements. She took 13 therapy sessions and was presented with idiosyncratic case conceptualization. Psychoeducation on the illness, maladaptive thoughts identification, coping statements, and verbal challenging were used in a collaborative way for cognitive restructuring of the client. Behavioral techniques of extinction and behavioral activation were also practiced. The focus of terminal sessions was on anger management and it was found that she needed couple of more sessions in order to help her manage her anger. However, the therapy was terminated on part of client after attainment of short-term goals. The client reported to have 75 % improvement in her overall condition and remained compliant throughout the therapy.

Keywords: conversion disorder, cognitive behavioral therapy, cultural coping statements, Muslim, Pakistani, female

The conversion disorder with its astonishing and uneven conceptual advancements remained a vital and well-recognized issue for almost 3900 years yet vanished from most of the empirical literature gradually (Brosin, 1966). The appearance of somatization, dissociative, and conversion symptoms in Diagnostic and Statistical Manual of Mental Disorder (DSM) and International Classification of Diseases (ICD) substituted hysteria in 1980 (Espirito-Santo & Pio-Abreu, 2009).

The conversion disorder also known as functional neurological symptom disorder involves a variety of motor symptoms (such as weakness or paralysis, abnormal movements, etc.); sensory symptoms (such as absent of skin sensation, vision, or hearing, etc.) and incidents resembling epileptic seizures, and syncope or coma. In some cases, volume of speech is lessened or vanishes, changes in alteration, and diplopia (double vision) (APA, 2013). Physical or psychological events causing anxiety,

stressors or traumatic events, are known to cause conversion disorder and may eventually lead to avoidant behaviors (APA, 2013).

The precise prevalence of conversion disorder is not known, however, the referrals from neurology clinic have 5% cases of conversion disorders (APA, 2013). Conversion disorder are more associated with female gender and more symptoms related to left side of the body (Allin, Streeruwitz, & Curtis, 2005; Krasnik, Meaney, & Grant, 2011). In comparison with epilepsy patients, avoidant behaviors and problems in emotional expression lead to onset of conversion disorder especially psychogenic non-epileptic seizures (PNES), a subcategory of conversion disorder (Goldstein & Mellers, 2006). This shows that avoidant behaviors serve as a precipitating factor of conversion disorder. However, Hayes (2005) argued that experiential avoidance generally inclines the person with conversion disorder to escape from the aversive situations. Experiential avoidance also frequently happened among people who have formerly encountered traumatic events and is very much related to the intensity of depression, anxiety, and somatization (symptoms often reported in conversion disorder) among (Fiszman, Alves-Leon, Nunes, Isabella, & Figueira, 2004; Mulder, Beautrais, Joyce, & Fergusson, 1998; Tull, Gratz, Salters, & Roemer, 2004). Comorbidity with other mental health issues is prevalent among people with conversion disorder. For instance, various research studies have shown depressive disorders to be present in 54% to 88% cases of conversion disorders (Hurwitz & Kosaka, 2001; Katon, Ries, & Kleinman, 1984; Lipowski, 1990; Morrison & Herbstein, 1988; Wilson-Barnett & Trimble, 1985). The symptoms of conversion disorder are also seen in women with history of eating disorders (M. Goldstein, Madden, & Peters, 2013). A diagnosis of conversion disorders is frequently made in individuals who have history of different somatic issues, anxiety disorders, depressive disorders or personality disorders (APA, 2013).

Diagnosing conversion disorder is very tricky. Neurological disease or physiological abnormalities should be ruled out prior to ruling in conversion disorder diagnosis (APA, 2013). A thorough neuro-diagnostic investigations comprising prolonged video electroencephalographic monitoring at the time of seizure should be present for diagnosing conversion disorder (Hurwitz, 2004).

Treatment of Conversion Disorder

In terms of intervention, there are cases of conversion disorder in which psychogenic sensorimotor deficits can only be managed through behavioral approach without any psychiatric treatment (Sullivan & Buchanan, 1989; Teasell & Shapiro, 1994). On the other hand, there are conversion disorder cases that have recovered from primary psychiatric disorders and only need management of neurologic deficits through active rehabilitation (Sullivan & Buchanan, 1989; Teasell & Shapiro, 1994).

The symptoms of conversion disorder can be managed through outpatient treatment by using same strategies as employed in inpatient settings (Leong, Tham, Scamvougeras, & Vila-Rodriguez, 2015; Roffman & Stern, 2005). In some cases, there is a need to admit patients in inpatient psychiatric unit when symptoms are severe and entrenched (Hurwitz, 1988; Hurwitz & Kosaka, 2001). Cognitive Behaviour Therapy (CBT) and expressive–supportive therapy was found to be effective in treating conversion disorder (Kneebone, 2016).

Despite a hectic task for physicians, in most of the cases, a detailed history with clear review of every physical symptom is helpful (Salmon, Peters, & Stanley, 1999). According to authors, comprehending the physical and neurologic symptoms through rational cognitive framework by giving tangible mechanism and non-blaming explanations also helps the patients.

Various evidence-based treatments employing CBT approaches have been designed for different types of conversion disorders, for instance PNES and psychogenic movement disorder (L. H. Goldstein et al., 2010; LaFrance & Friedman, 2009; LaFrance et al., 2009). A research study has shown that in comparison with standard medical care, CBT on PNES brought significant reductions in frequency of attacks (L. H. Goldstein et al., 2010). Additionally, such evidence based treatments have also shown that managing conversion or dissociative symptoms with CBT brought significant improvements in different symptom scales assessing mood, anxiety, posttraumatic stress disorder symptoms, and psychological well-being (L. H. Goldstein, Deale, O'malley, Toone, & Mellers, 2004; LaFrance & Friedman, 2009; LaFrance et al., 2009). However, such studies have various limitations, such as; smaller sample sizes, limited long-term follow-up data, and are initial interventions thoroughly assessed in conversion disorders (Baslet, 2012). In a research study, patients diagnosed with PNES were randomly allocated to standard neuropsychiatry care or standard neuropsychiatry care plus individual CBT condition (L. H. Goldstein et al., 2010). At the termination of therapy, patients assigned to standard neuropsychiatry care plus individual CBT revealed more reduction of psychogenic seizures as compared to control group. Additionally, religious therapy was also found to be effectiveness in treating patients with conversion disorder (Razali, 1999; Wijesinghe, Dissanayake, & Mendis, 1976; Witztum, Grisaru, & Budowski, 1996).

Case Introduction

Miss S., a 24 years old, unmarried Muslim Pakistani girl, migrated to Malaysia with her family recently. She was the second born with total three siblings including her. She was presented with the complaints of fits (convulsions), restlessness, numbness in legs, poor coordination and balance, burning during urination and retention. She had gone through several medical examinations both in Pakistan and in Malaysia. Miss S undertook a thorough neuropsychiatric examination. The neurological and cognitive assessments verified that her presenting symptoms were not due to an identifiable neurological process. The negative findings on EEG resulted in her referral to a Clinical Psychologist. The client and family decided to consult Pakistani Clinical Psychologist due to her language and cultural barriers. She had difficulty understanding English language, so it was not possible for her to consult Malaysian clinicians for psychotherapy.

Presenting Complaints

She reported to have fits very often (i.e. mostly every day, sometimes with a gap of 1 day). At the time she experienced the fit, she was not able to move as her body stretched and her movements are uncontrollable. Sometimes she fell on ground and bubbles of saliva come out of her mouth. Severity of fit varies but, on an average, she rated it as seven on a Likert scale of 0-10, showing 10 as the highest severity and 0 as the minimum. She reported to have this problem for two years and she has not consulted any clinical psychologist yet. She also reported

feeling angry about her fits and towards her family. According to her, the anger was triggered from past one year since she migrated to the new country, Malaysia. She also reported feelings of numbness which according to her prevailed since childhood. Also, she has poor coordination and not able to maintain balance, this happens just before or after a fit. In addition, she reported to have pain in legs and mild to moderate headaches. Because of her symptoms, she remains sad and can't sleep well or eat properly.

History

At the time of referral, the patient was living with her parents and siblings in Malaysia. Her family migrated to Malaysia since 2014 when her father started small business in Malaysia. Previously they were living in Pakistan and faced financial crisis due to her father's business failure. She reported to have no significant health issues during her childhood and early adulthood, however, she reported to have headaches, poor balance, and numbness since her adulthood (college life). She had high inclination towards religion and was a practicing Muslim. She had no close friends, but she had a romantic relationship with a boy to whom she got engaged in 2011. Her engagement broke in 2012 as her fiancé got interested in someone else. She blamed herself for this breakup. Her body often stretched, her body parts moved uncontrollably, and sometimes she fell on ground. These symptoms were aggravated with the death of her mother due to heart attack in 2013. After the bereavement period, she slightly felt better once she started psychiatric medication but failed to improve further. Her condition exacerbated and resulted into convulsions, pain in legs, and headaches in early 2014. Her breakup with fiancé and death of her mother were precipitating events towards illness. Patient remained sad because of the symptoms. Her appetite was reducing day by day and she couldn't sleep properly and took hours while going to sleep. The patient reported to have no psychiatric illness in her family of origin. Her maternal aunt had some psychological problem, but they never took treatment from an authorized psychiatrist. Patient's aunt often had fits and went unconscious. Sometimes she started abusing others. She was given some herbal medicines, but the client was not aware of the exact diagnosis of her aunt. According to the client, the severity of her fits increases as she shifted to this new country and she felt lonely and helpless here.

Assessment

Miss S signed a consent form before the assessment sessions initiated. The consent form also contained statement regarding publication of this case on the condition of keeping the anonymity of client. Miss S gave written consent to publish the present case if her identity was kept anonymous. Generally, the assessment comprised of informal and formal procedures. Pre-assessment was done to confirm the diagnosis and intensity of the client's symptoms. Then, post-assessment was done to analyze the level of effectiveness of the cognitive-behavioral therapy as the treatment modality.

In order to obtain detailed history of present illness, background information, the client's way of coping with difficult situations, her way of thinking for other people, early life experiences, her view about herself along with all predisposing and precipitating factors of illness, a comprehensive clinical interview was conducted. Clinical interview made it possible to obtain history of previous treatments sought. Then all the data was assessed to formulate a tentative

diagnosis according to DSM-5 (APA, 2013). The collected information was then arranged in the appropriate headings for case formulation and conceptualization.

Apart from the clinical interview, behavioral observations were also conducted as part of the assessment tool. Miss S always came on time on her assessment session and was dressed appropriately. She was cooperative, answered all the questions, and reported everything in detail. Miss S showed restricted affect when emotionally charged events were discussed. She tried to answer all the questions asked, however, her volume reduced when she was asked about her life with the presented symptoms. She wanted everyone to understand her. Miss S reported that she missed her fiancé; however, she denied answering other specific questions pertaining to her fiancé.

Few psychological tests were used to comprehensively assess this case. Visual analogue scale (VAS) was used to obtain the client's symptoms (fits, numbness in legs, restlessness, coordination and balance issues, burning during urination, urine retention, sleep issues, appetite issues) along with her subjective ratings on a 10 point rating scale (Bennett-Levy, Thwaites, Haarhoff, & Perry, 2015). It provided a view of intensity of client's symptoms.

The Dissociative Disorders Interview Schedule-DSM-V version (Ross et al., 1989) which is a semi structured interview having 131 items was also administered. It is often used as a diagnostic instrument. It is used for the diagnosis of all dissociative disorders, somatization disorder, and conversion disorder following the diagnostic features of Diagnostic and Statistical Manual of Mental Disorders (DSM-5) (APA, 2013). According to developers of this instrument, the 16-section instrument has no total score, however, each section is independently scored. The interview schedule can be administered in half an hour and has statements regarding positive symptoms of schizophrenia, secondary features of dissociative identity disorder, extrasensory experiences, substance abuse, and other items relevant to the dissociative disorders. Miss S endorsed symptoms related with diagnosis of conversion disorder and responded with "Yes" on items of somatic complaints.

The Beck Depression Inventory-II (BDI-II) (Beck, Steer, & Brown, 1996) was administered to check severity of symptoms of depression. Miss S scored 25 on the BDI-II which showed that client had moderate symptoms of depression.

Case Conceptualization

The expanded CBT model for medically unexplained symptoms (Deary, Chalder, & Sharpe, 2007) was used to conceptualize the present case. This model showed that how predisposing factors (genetics and early experiences, neuroticism, and somato-psychic distress) and perpetuating factors (sensitization, attention, attribution and beliefs, response to illness) resulted in onset of medically unexplained symptoms.

It was evident in the present case that a combination of adversity during childhood, characteristic inclination to somato-psychic distress, and ease of sensitizing distress resulted in intensifying the symptoms encountered and increased their detection. Life events in the form of engagement breaking and death of mother, and stress of shifting to a new country, had resulted in physiological changes. As the patient had developed extreme reactions to previous life events, she showed same reactions to new stresses and through selective attention

focused on her bodily symptoms. This eventually resulted in increasing her sensitivity of symptoms in the form of reduction in symptom detection threshold. She did not seek psychological help earlier; therefore, lack of adequate descriptions or advice regarding her symptoms increased anxiety, conversion symptoms, and her focus on symptoms. The classical conditioning led to association of signals of stress with conversion symptoms. She had avoided treatment of her symptoms for a long time which had increased her sensitivity towards symptoms through operant conditioning principles. She had been experiencing symptoms of conversion disorder for a long time, which brought activation of physiological mechanisms, eventually more symptoms, higher sensitivity, focusing attention on symptoms and avoidance (behavioral or cognitive) resulted. The client was locked in a vicious cycle of symptoms maintenance.

Sociocultural Considerations

According to sociocultural formulations of conversion disorder, it is prohibited in some parts of the world and in some cultures to directly express extreme emotions (Owens & Dein, 2006). As a result of this prohibition, individuals are susceptible to tolerable forms of expressions and start exhibiting conversion symptoms. According to authors, conversion disorder eventually represented a non-verbal communication ideas or emotions that are unacceptable in that culture. Gender roles, religious beliefs, social and cultural impact reinforce such prohibitions (Schwartz, Calhoun, Eschbach, & Seelig, 2001).

Course of Treatment and Assessment of Progress

The treatment of Miss S spanned across 13 individual therapy sessions; one session every week. Approximate time duration of every session was 50 minutes. Furthermore, no follow up or booster sessions were taken as client did not show up after achieving short term goals. Treatment of Miss S was based upon cognitive-behavioral model that accepted a significant role of cognitions (i.e., judgments, meaning, attributions, etc.) in defining one's responses to life events emotionally and behaviorally (Beck, 1975; Ellis, 1962). We adapted CBT according to Miss S's culture and religion in order to frame her beliefs in vital sociocultural perspectives that assigned peculiar importance to her actions. The details of the sessions are given below:

Session 1
Supportive work and psychoeducation

First stage of treatment was based on carrying out supportive work and providing psychoeducation to Miss S to help her comprehend her symptoms. It also helped in establishing a positive and dependent emotional attachment of the client with the therapist in order to increase willingness of the client to achieve therapeutic goals, change of behavior, and ensure her compliance with the psychotherapy. Miss S was provided with the unconditional positive regard, empathetic and active listening, proper attention, suggestions, and reassurance not only in the early phase of the treatment but also throughout the intervention as part of psychotherapy. To motivate and encourage her, some examples were given from the Qur'anic verses.

It proved to be particularly important with the client to encourage her to speak up and break her inhibitions. The therapeutic alliance was established adequately and resulted in the compliance and motivation of

the client. During the first few sessions, she appeared resistant in sharing about her personal life but gradually opened and started sharing easily. She was encouraged for her emotional expressions and was reinforced for it. The initially developed dependent and attached relation with the client proved to be effective in fostering autonomy and self-reliance in her and brought a therapeutic change. The positive relationship with the client also encouraged her to become willing recipient of the psychotherapy and capable to achieve therapeutic goals.

Psychoeducation was the integral and important part in the 1st session. Miss S and her family were explained on the concept of symptoms of conversion in an understandable way. The client's family belonged to a rural area and they thought that it was a medical problem and stated that the client was very weak, so she needed their attention to deal with the fits. She was provided psychoeducation first by emphasizing that the client's fits were not having any medical basis. Family was explained that the client was not producing the symptoms intentionally either; however, she could play an important part in controlling her fits. Her family was given a thorough and comprehensive detail of the illness, its possible causes, its triggering factors, its maintaining factors, as well as underlying gender and sociocultural schemas that shaped her symptoms. Family was explained the concept of repression of painful emotions and the symptoms as a way of communication of negative emotions and how her culture and gender was influencing her symptoms. The client was encouraged to bring out self-control to encounter fits and was provided with a positive view of a fit-free life. Miss S and her family were enlightened with the concepts of primary and secondary gains and also the role of secondary gains in maintaining the symptoms. The client and her family were able to identify the role of attention in maintaining the problem. The client and her family also developed an insight into her problem as a form of communication.

Session 2
Coping statements

Coping statements were introduced in the 2nd session to enhance the client's self-control with the rationale of enhancing the internal control of client and counter helplessness and negative thinking regarding her illness. Rational coping statements are factual encouraging phrases consistent with social reality. Clients are encouraged to repeat them consistently to reinforce the ideas for themselves (Ellis & MacLaren, 2004). On the other hand, forceful coping statements are an emotive technique, which serve to enhance the effectiveness of rational coping statements by adding an emotive element to it (Ellis & MacLaren, 2004).

The client was educated about the role of overt or covert self-statements during the fits. Negative statements induce a sense of helplessness and hopelessness in a person, while the positive statements induce a sense of control and encourage a person to cope with the problems efficiently. The following verses from Holy Quran were also made part of her coping statements and increase her motivation levels as client reported herself to be a religious person.

"Your Lord has not forsaken you, nor He was disgust." (Quran 93:3)

"And undoubtedly, the following one is better for you than the preceding one." (Quran 93:4)
"And undoubtedly, soon your Lord shall give you so much that you shall be satisfied." (Quran 93:5).

The therapist and client worked mutually and constructed six rational and forceful statements that were found most helpful for the client and wrote them on 3×5 flash cards (McBride & Petersen, 2002). These cards were pasted on the side wall of her bed from where she could easily read them to herself. She was instructed to repeat them to herself repeatedly many times a day. The client reported that these coping statements induced a sense of control in her and proved effective for her. She compliantly viewed them and repeated them regularly.

Activity scheduling

Activity schedule is one of the simplest and most useful behavioral technique for providing the clients with structured routine (Haddock, 1996). Activity schedule was employed in the 2nd session for planning her day, to give her a sense of direction, control, and serve to distract her from her symptoms. The activities were planned by the therapist with mutual agreement of the client. The client was assigned with responsibility of her own self and doing the reinforcing activities and remaining fit free. The client showed compliance with the activity schedules. On her discharge, she was given another activity schedule for home by incorporating healthy and reinforcing activities. The client complied with it which was shown on her follow up session. Later, she was asked to schedule her own day to increase her internal locus of control.

Session 3 and 4
Extinction

The method of extinction was applied on the client to reduce her fits by withholding the reinforcers of her fits. All behaviors are maintained by reinforcement. When the reinforcers that are maintaining a behavior are no longer available, the person eventually stops engaging in the behavior. The process of eliminating (withdrawing or withholding) reinforcers is called extinction (Spiegler & Guevremont, 1998).

In the present case, the process of extinction was applied in the 3rd session by first identifying the reinforcers for the maintenance of fits. The reinforcers were found to be the attention. The client's family was educated about the role of attention in maintaining the fits. Family was given the concept of extinction burst as well as spontaneous recovery to prepare them beforehand. The family was explained that when the behavior is not reinforced any more, it often increases in frequency, intensity, or duration before ultimately stop. The client's family was instructed to leave the client alone and not to attend her whenever she displays any symptoms of the fits. The client was also educated that it was to increase her own self-control to achieve a self-reliant life without fits. The brother seemed reluctant in accepting it as his gender stereotypical role did not allow him to leave Miss S when she is experiencing the fits. He used to make a point in attending the client in the first few days. However, he eventually complied with the treatment when he was taught no damage will be done to her. The technique proved to be effective when the client's fits frequency dropped to zero after a period of 1 month.

Differential reinforcement

The concept of differential reinforcement was introduced in the 3rd and continued in the 4th session. The differential reinforcement involves reinforcing an acceleration target behavior that is an alternative to the deceleration target behavior (Spiegler & Guevremont, 1998). The rationale of applying differential reinforcement was to increase the frequency of the desirable behavior and to decrease the

frequency of undesirable behaviors of pain talk and fits. It was implemented in following way:

Firstly, the desirable behaviors were clearly specified which included pain free talk, adequate expression of feelings, doing her own chores, actively spending her day, and completing her homework assignments. Secondly, the undesirable behaviors were also defined that included talk about symptoms, lying down most of the day, the occurrence of fits, or any other symptoms that were related to fits. Thirdly, the reinforcers of the client were identified. In the present case the reinforcers were attention from family, some food items (i.e. sandwich, samosa, and cold drink) and telephone calls to family and friends in Pakistan. These reinforcers were used to reinforce the desirable behaviors. Instructions were also given to family in Pakistan not to reinforce her when she engaged in undesirable behaviors. Fourthly, it was made sure that the reinforcers were given immediately and consistently, such verbal praise and encouragement to appreciate the client's efforts in controlling her fits and appreciating her when she was engaged in having a walk, talking to others, doing chores etc.

Fifthly, reinforcers were immediately removed for undesirable behaviors. Sixthly, intermittent reinforcement was used to maintain the desirable target behaviors, by gradually thinning consistent and immediate reinforcement. Once a target of four days of consecutive fit-free duration was attained, the reinforcement schedule was made intermittent so as to make the target behavior more resistant to change. Seventhly, generalization was promoted by instructing the client's family to reinforce her for fit free period and to draw all the attention while exhibiting any fit symptoms. The differential reinforcement was hard to implement at first since the client's elder sister was not willing to delay talking to her on phone while the client displayed symptoms of fits. However, she started abiding by the instructions of therapist once she was explained the rationale of differential reinforcement.

Session 5
Cost-benefit analysis

Cost benefit analysis regarding her anger problem was done in the 5th session and was also given as a homework assignment (Scrimali & Grimaldi, 2012). It was used in order to manage her anger and fits. She wrote some advantages and disadvantages but was not successful in identifying them completely. She also wrote the positive and negative effects of her attacks in the short term and long term. Hence, it was done in the session. The analysis of her list of advantages and disadvantages revealed that she had reported just one advantage while, had four disadvantages of having anger and experiencing fits. The analysis of the lists revealed the dysfunctional nature of the anger. She came to know that there were few benefits as compared to the disadvantages especially in the long-term. The client got an insight into her problem.

Session 6 and 7
Breathing restructuring technique

Breathing restructuring technique was taught to the client in 6th and 7th sessions as a relaxation method after she was able to control her fits for three consecutive days. The rationale was that efficient control of body's energy reactions depends on maintaining a specific balance between oxygen and carbon dioxide, which is maintained through an appropriate balance and depth of breathing (Walker, Norton, & Ross, 1991).

Coping statement

The client reported that she felt as if she was having fits again anytime soon. Hence, coping statements were introduced again and practiced in session.

Session 8 and 9
Meditational component

In the first component, the client was taught to breathe smoothly and normally while counting her breathing. The client was willing to share further in this session that she was trying to control her negative thoughts and wanted to improve her depressive symptoms a well. This was done by keeping one hand on the chest and the other on the abdomen and counting 1 on breathing in and saying relax on breathing out, then 2, then 3 and so on up till 10, and then going back to 1. The client was asked to focus on her breathing despite the distracting thoughts coming to her mind. The client was asked to practice this component by focusing attention to her breathing initially twice a day in a quiet place and after four days she was taught the next component in this session.

Breathing control component

During this component of the breathing restructuring technique, the client was asked to slow down her breathing by slowing down counting and pausing slightly at the end of each breath. After repeated practice, she was told that she should bring her breaths to 10 or fewer breaths per minute. She was instructed to practice this component at home. She was educated the rationale of this component which was having control on one's breathing during stress to prevent over breathing or hyperventilation. She found it difficult to breathe correctly initially, but later she was able to accomplish this task through practice and feedback from the therapist in the session.

Double column technique

Double column technique was used in the session 8th and 9th to deal with anger and depression related with her symptoms, by having the client write down various "hot thoughts" going through her mind whenever she was upset. Then substitute less upsetting and more objective "cool thoughts" using the double column method (Burns, 1980).
She was instructed to listen for her "hot thoughts" to tune in to antagonistic statements that go through her mind. She was told to record this dialogue without any censorship including all kinds of colorful language and revengeful fantasies. Then she was instructed to write down "cool thoughts" that were more objective and consistent with reality and at the same time less inflammatory, to help she reducse her feeling of anger and overwhelming emotions around mother and fiancé.

First, therapist presented her with some examples to show her on how to do it by putting in the client's own example. Later on, she was given to complete it for the homework. She was still unable to write down many hot thoughts and stated that she had not experienced any sadness in the past few days. Hence, the therapist did the exercise again and quoted the client's recent depressive thoughts that were directed towards her symptoms. She was asked to bring out the hot thoughts that she experienced during her anger towards her fiancé and then educated her about the cool thoughts. In this way, the therapist guided that even though she may not experience anger towards her fiancé, she could feel angry towards someone else and the same

procedure could be used to calm her down by practicing it whenever she felt angry.

Session 10 – 13
Applied relaxation

Applied relaxation (Bernstein, Borkovec, & Hazlett-Stevens, 2000) was introduced to the client in the 10th 9th session for the management of her headache which accompanied the fits and continued in the next session. . A shorter procedure was used since her fits were controlled. During the relaxation training, the main focus was to teach the main components of relaxation training and discrimination training, and later on continue the rest of the procedure on follow up. In the session, the client was taught the sequential tension and relaxation cycles of 14 muscle groups in 18 separate steps (Bernstein & Borkovec, 1973). The procedure began with sequential tension and relaxation cycles of 14 separate steps:

1. Right hand and lower arm (by having the client make a fist and simultaneously tense the lower arm); Left hand and lower arm; Both hands and lower arms; Right upper arm (by having the client bring her hands to the shoulder and tense the bicep; Left upper arm; Both upper arms
2. Right lower leg and foot (by having the client point to her toe and tensing the muscles)
3. Left lower leg and foot
4. Both lower legs and feet
5. Both thighs (by pressing the knees and thighs tightly together)
6. Abdomen (draw the abdomen muscles in tightly)
7. Chest (by inhaling deeply and controlling the breath)
8. Shoulders and lower neck (by having the client hunch her shoulders or draw his shoulders towards the ear)
9. Back of the neck (having the client press head backward against a head rest or chair)
10. Lips (by pressing them together very tightly but not clenching the teeth)
11. Eyes (by closing them tightly)
12. Lower forehead (by drawing eyebrows and frowning)
13. Upper forehead (by having the client wrinkle the forehead area)

The relaxation steps were demonstrated and then rehearsed by the client with the therapist's instructions. In the same session, she was asked to use pleasant and relaxing imagery by imagining her favorite relaxing scene, which was elicited before the imagery. She was asked to imagine the scene as vividly as possible, with closed eyes by focusing on the details of the scene while enjoying the state of relaxation. Achieving a state of relaxation by deepening exercise was also taught after completing the tension relaxation cycles by counting from one to five and feeling progressive more and more relaxed. After deepening exercise was done, she was instructed to breathe slowly, deeply, and evenly through the nose and concentrate on breathing with each inhalation and exhalation, and then instructed to return to a state of alertness in a gradual manner.

In the 10th session, discrimination training was taught to the client which helped her in becoming more aware of the tension in her body and be able to detect tension early enough to prevent headache. The hand and lower arm were used for demonstration. She was instructed to complete the tension and relaxation cycle and then tense the arm and hand only one half as much as before, noticing the sensations when relaxing it, and then tense the muscles another half lesser, which was actually one fourth of the initial level of tension. The client grasped the concept and was able to discriminate between light and heavy pain and how to

avoid it. In the same session, the client was taught discrimination training with the neck and facial muscles. She was instructed to complete the tension-relaxation cycle once and then generating half and then one fourth tension and subsequent relaxation. The importance of discrimination training was described as they contributed to the most to the headaches.

In the 11th session, the client was taught to reduce muscle groups into eight, which consisted of hands and lower arms, legs and thighs, abdomen, chest, shoulders, back of the neck, eyes and forehead. The client was educated that by reducing the muscle groups, the procedure was shortened in order to make it more usable and portable. In the same session, the concept of relaxation by recall was introduced, by having to become relaxed without going through the tension-release cycles. The relaxation with eight muscle groups was practiced in the session followed by deepening attention to breathing and subvocalizing the word "relax" with exhalation periodically. This was a difficult concept for the client to understand but she understood it after description in simple words. She was given it as a homework. The client reported that her headache problem was controlled, and she felt fresh after doing the relaxation exercise.

In the 12th session, the muscle group was reduced to four and the concept of cue-controlled relaxation was introduced. The four muscle groups included the arms, chest, neck, and face (especially eyes and forehead). In this method, the client was asked to focus on her breathing and was instructed to take a deep breath and think the word "relax" as she exhaled slowly and easily. The word "relax" thus became a cue for her relaxed state. The client found it very effective.

After the client had mastered the 4-muscle group relaxation, the relaxation through recall was introduced in the 13th session. The goal of recall relaxation was to train her so that she could learn to relax through recall rather than tensing all the muscle groups. She was asked to focus and identify any sensations of tension in any muscle group and then to relax and recall what it felt like to release the tension when she had performed the progressive muscle relaxation. Initially, the client had difficulty in doing the recall relaxation as she reported that she could not recall the relaxed state without tensing the muscles. Thus, recall relaxation was done many times during the session which made her more comfortable with the idea and she started using the idea more naturally. The client reported more than 50% improvement in her headache problem by using this procedure.

Anger management

The anger management was started in the 10th session after explaining the ABC model of anger. The ABC model (Ellis, 2003) was used to teach the cognitive view and process of the anger. Issues from the client's daily life were used to highlight the cognitive component of feeling and behavior. The therapist and the client would label the A (activating event) and C (the emotional consequence) of an emotional episode and the therapist helped her to figure out the possible self-statements (B) that could have led to the dysfunctional emotion of anger. She was explained how the activating events were not the cause of her emotions or behaviors, rather, the thoughts were responsible in shaping them. She was also given an orientation about healthy and unhealthy emotions and how they played their role in our life.

However, other techniques could not be introduced due to the lack of time and her strong denial for anger. Furthermore, she also did not show up for the follow ups, hence this area was not adequately covered.

Therapeutic Outcomes

The therapeutic outcome was assessed on the two levels which gave an indication that how much the therapy was successful on the patient.

Quantitative Analysis on Pre- and Post-Treatment

Visual Analogue Scale

Comparison between pre and post treatment ratings on problematic areas. Table 1 shows the client's symptoms on a 10-point scale of Visual Analogue Scale (VAS). The is done in order to understand the severity of the symptoms at the pre- and post-treatment level. Based on the results, it was found that the severity of the symptoms reduced at the end of the intervention.

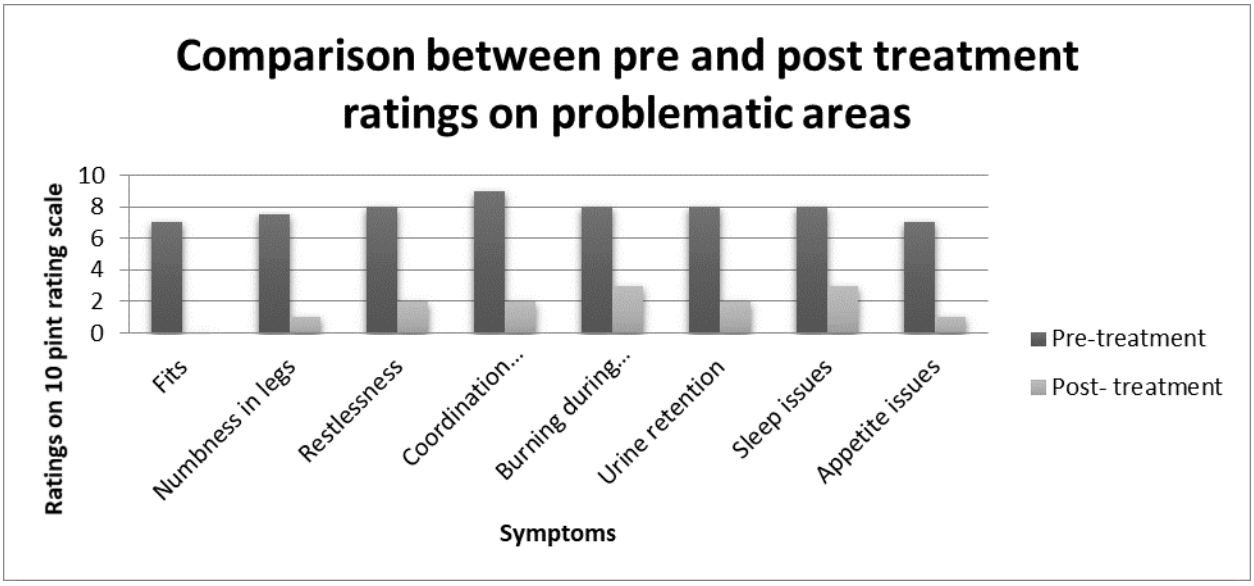
Table 1

Client's symptoms on a 10-point scale of VAS

Symptoms	Pre-treatment score	Post-treatment score
Fits	7	0
Numbness in legs	7.5	1
Restlessness	8	2
Coordination and balance issues	9	2
Burning during urination	8	3
Urine retention	8	2
Sleep issues	8	3
Appetite issues	7	1

Figure 1

Ratings on VAS at pre- and post-treatment level on problematic areas



Beck Depression Inventory-II (BDI-II)

Table 2 shows the client's BDI-II scores at the pre-and post-treatment level. Based on the results, Miss S's symptoms of depression were clinically improved from moderate level to minimal level of depression at the end of the treatment.

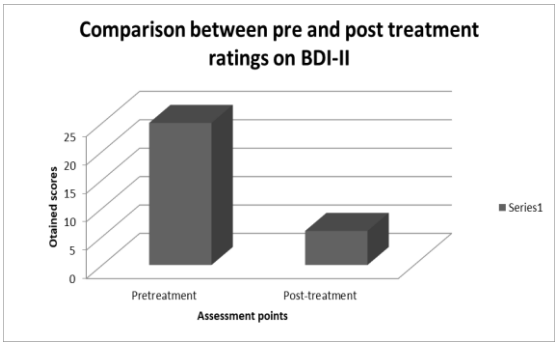
Table 2

Client's BDI-II at pre- and post-treatment level

	Pretreatment	Post-treatment
Total obtained score	25	6
Severity	Moderate depression	Minimal depression

Figure 2

Ratings on BDI-II at pre- and post-treatment level



Qualitative Assessment of Pre- and Post-Treatment

The results of the therapy revealed that the cognitive restructuring yielded favorable results. Moreover, client's functioning also improved. As reported by the client, the most effective technique for her in reducing her symptoms was extinction followed by differential reinforcement. Through psychoeducation, she came to know how her symptoms developed. This made her curious about how her own emotional distress was resulting in her symptoms. She was thankful as her symptoms had reduced and can be managed well. She was also able to carry out her day to day activities properly.

Complicating factors

Miss S's symptomatology relating to conversion disorder symptoms was cautiously assessed at the time of initial assessment as well as throughout the therapy, to rule out any neurological or other physiological components of her symptoms. The neurological and cognitive assessments verified that her clinical presentations were not due to an identifiable neurological process.

The important aspect regarding Miss S. was her compliance of treatment regimen throughout the therapeutic program. She did not show any resistance or agitation during the therapy. This may have been due to sudden improvement in her fits after understanding the mechanisms of development of her symptoms (i.e. psychoeducation), extinction, and differential reinforcement. The gradual improvements in her symptoms, understanding costs of her symptoms, rational and forceful coping statements may have given Miss S. the needed levels of motivation which kept her compliant and facilitated achieving short term goals.

The techniques of extinction and differential reinforcement, adding reinforcers in therapeutic program demanded extensive participation of Miss S's family members. The family members were to be cautious in differentially reinforcing Miss S's behavior. Provided that her brother was reluctant while application of extinction, the therapist was required to be patient with him and explained to him the therapeutic efficacy of the technique. The management of anger was complicated by the fact that Miss S denied her anger issues and there were no follow-up sessions after achievement of short-term goals. Therefore, symptoms could only be assessed till 13 therapy sessions.

Other complicating factors were absence of ample time as Miss S stopped coming for sessions immediately after the symptoms of conversion had settled. She basically had to go back to Pakistan. Although she ensured to practice the techniques taught during therapy, there was no way of assessing the continuation of treatment goals. Due to

anger issues, family therapy was recommended.

Access and barriers to care

There were no significant barriers which hindered provision of therapy. Treatment sessions continued as per schedule and addressed conversion symptoms as part of short-term goals in a steady fashion. Miss S and her family were able to cooperate with therapist and ensure practice of therapeutic techniques at home.

Follow-Up

In order to assess the continuation of short-term goals, a post-assessment was carried out on session 13. Visual Analogue Scale was administered to check severity of her symptoms. Moreover, Beck Depression Inventory-II was administered to compare the levels of depression at pre- and post-treatment levels. Miss S. had also reported efficacy of every technique in reducing her symptoms. Results revealed improvement in functioning. This improvement in Miss S's indicated that the main therapeutic goals were achieved during 13-session therapeutic program.

Treatment Implications of The Case

This case demonstrated the effectiveness of culturally adapted coping statements with cognitive behavior therapy for a Pakistani immigrant Muslim patient of conversion disorder (Beshai, Clark, & Dobson, 2013; Bhugra & Bhui, 1998; Naeem et al., 2015; Rathod, Kingdon, Phiri, & Gobbi, 2010). Coming from a collectivist culture and migrating to a new society itself carries a burden of acculturation and adaptive issues, whereas, a complex situation was created as patient was not comfortable discussing her problem with a foreign clinician, thus consultation was made with the clinical psychologist from the same background and culture as patient. Moreover, this intervention of using culturally and religiously adaptive coping statements along with other behavioral management of CBT exemplified the importance and effectiveness of using indigenous or culturally appropriate interventions considering the background of every patient. This case study was relatively novel in the existing literature of conversion disorder whereas balanced and appropriate amalgamation of CBT techniques (anger management, delaying techniques, relaxation training) with culturally appropriate counseling and coping strategies were used. Furthermore, family's psychoeducation and support played a vital role in managing the problem.

Recommendations to Clinicians and Students

According to U.S. Department of Health and Human Services, there are difficulties and barriers for ethnic minorities to receive quality mental health services and reported poor treatment outcomes as compared to majority groups because of cultural barriers (USDHHS, 2011). Therefore, to provide effective treatment, culturally responsive interventions should be considered by clinicians. This case study discusses a case to explain how cultural adaptations of coping statement can be used with CBT. These interventions may not use exactly for other clients of conversion disorders, as used in this case. As cultural variations and intra-cultural factors varies, therefore, we suggest to clinicians and trainee students to consider cultural complexities (Sue & Sue, 2012) while devising management plans for their clients.

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